A FEW OBSERVATIONS

ON

THE TEETH

AND THE PRACTICE OF

Painless Dentistry.

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COGSWELL ON THE TEETH.

The Teeth considered with regard to Mastication, Articulation, and Personal Appearance.

FIRST, WITH REGARD TO MASTICATION.

ABUNDANT supplies exist as articles of food, in the animal and vegetable kingdoms, and by a bountiful Providence are adapted to the tastes and instincts of all his creatures. But before these articles of food become nutriment for the body, they must undergo certain processes, whereby they are broken down into smaller particles, and being mingled with the fluids of the mouth are comminuted into a fine mass, and prepared for the action of the stomach in the process of digestion.

Many labour under the idea that if they cut up their food very small, and then lubricate it, thus prepared with saliva before swallowing, it is as efficacious as if they had performed the whole process from first to last within the mouth; but this is a grievous misconception, and should be dispelled as quickly as possible, to remove a very great error which is daily, nay, hourly, committed. The glands which eject the important secretion termed saliva into the mouth, have not their powers properly exercised when the molar or grinding teeth are wanting, and it is somewhat singular, though proving the wonderful provision made by Nature to

right herself in case of defect or damage, to find that the action of artificial molar teeth, when properly fitted, is to excite the salivary glands to perform their most valuable functions, exactly as if the natural teeth had not been removed. This is indeed an important boon, and to the unreflecting, who think that simply supplying a tooth to fill a gap in the mouth, no matter how constructed, or by whom made, is of little consequence, it will prove what can be done by skill and science to assist Nature in preserving the functions which support the life that is given to us for some wise and beneficent purpose.

It should be explained that the mere circumstance of effectual comminution of the food is not the most essential act preparatory to digestion, for, without a due admixture of saliva, the food would be a source of torment or pain, if not, indeed, of direct illness; and it is to preserve the flow of saliva which is produced by the act of mastication in that state of perfection as regards certain properties which, for the sake of perspicuity, I will call quality and quantity, from various influences brought to bear upon it, that sound teeth are necessarily of the greatest advantage, the saliva thus formed being the great solvent in which the food is steeped, preparing the latter for the further action of the various fluids essential to its complete digestion.

The mere action of closing the jaws upon natural or artificial grinding teeth, produces an effect upon the glands, as if the moisture were being pumped out, which is indeed the case, but which it would be impossible to produce, at any rate to the proper extent, unless there were grinding teeth to bring together.

It is astonishing how much is thus produced and swallowed at a meal. A rough calculation fixes it at about six ounces, but it may be, and no doubt is, greatly increased or diminished, according to individual character, temperament, and constitution, and the stimulating nature, amount, and frequency of the food, &c.

The salivary glands are abundantly supplied with nerves, and an intimate connection seems to exist between their action and that of certain glands in the stomach, which shows that this liquid is not intended for the purpose of lubricating the food alone, but is a digestive fluid as well; and it also proves the unity and sympathy existing, and which are so requisite to perform the all-important process of digestion.

If persons possessed of sound teeth will try the simple experiment of opening and closing the jaws several times, pressing the teeth together rather tightly, as if in the act of mastication, they will immediately perceive the increased amount of saliva, which may even be made to unpleasantly fill the mouth. This is merely an experiment to prove the pump-like action which the molar and bicuspid teeth exert on the glands; but such action is not enough for effective digestion, as not only must the saliva be excited and flow in sufficient quantity, by the pump-like mechanism alluded to, but the teeth must be in such sound condition, when natural, and when artificial, as to triturate the food placed in the mouth in the most efficient manner. But even this is not enough; for another important part has yet to be performed before the first stage of digestion is com-

plete; and it is of the utmost consequence that it should be well understood, and too much attention cannot be given to it, and that is to make *complete and absolute use of the teeth;* to masticate slowly—not make two or three bites and then swallow the food, but leisurely, and without hurry, to enable the saliva to permeate the constituent parts of the food, so that the processes of disintegration, maceration, and lubrication, may reduce it to a mass fit for the action of the gastric juice, before which it has to present itself after descending the alimentary canal.*

The succeeding processes eliminate the nutritive properties of the food, which are then taken up by the absorbents for the nourishment of the body.

Eating slowly at all times, and resolutely to adhere to that habit, is of itself a great principle. It will, in combination with a healthy mouth, wonderfully improve the system, cause many eruptions of the face and body to disappear, which are often erroneously attribnted to serious causes, and give a healthy tone to every feature. The eyes especially suffer when indigestion is prevailing. They not only look yellow and dull, but the parts beneath them are heavy and puffed out; and it is almost a sure indication of a bad state of the stomach when they appear in that condition.

When the teeth are not able to sufficiently disintegrate the food, and the saliva is not only deficient in quantity, but impure in quality, is it to be wondered

* Œsophagus is the proper scientific term for this passage, as the alimentary canal is not confined to the duct between the mouth and the stomach: but from my wish to be sparing of even seeming technicalities, I have here, as wherever possible throughout the essay, made use of the most familiar English expressions.

at that the blood, the bile, and all the important humours and secretions of the body are acted upon by this abnormal state of things? Can it not be easily conceived that, irrespective of indigestion and its train of evils, the whole system becomes impaired; that, besides a listlessness and absence of that freshness which is experienced when pure blood is circulating in a healthy body, blotches and boils make their appearance, as beacons to warn the sufferer that the blood has become vitiated and impoverished, and that there is something radically wrong with the system, which requires correction, but which is seldom or rarely attributed to the mouth? And so it shows itself in lesser degrees where the mouth is not so defective; but the greater the disease of the mouth, the greater the pains and penalties endured in other portions of the system—destroying happiness, frequently racking the frame, and attacking the head-quarters of life itself, whilst the *cause* of this train of evils is too often not even surmised by patients.

The teeth, then, are the organs provided by nature for the mastication of food, which is an operation so essential to health, that without a due preparation of the aliments, the digestion must always be more or less impaired. For this purpose the position of the teeth and their peculiar shapes, seem admirably adapted to the part they have to play in the animal economy. In early infancy we notice a set of teeth, not numerous, and merely serving the child for a few years, (generally to the 6th or 7th year,) until the new permanent teeth, which are designed to last for life, replace the previous set, being larger, more firmly fixed—and better

adapted to the stronger aliments essential to the more advanced period of existence.

The position of the teeth, within the mouth, at the entrance of the alimentary canal, is only another link in evidence of the wonderful arrangement of our system, the mouth being the receptable for the nourishment of the body, the set of teeth within it the apparatus which causes that nouishment to receive the first stage of its preparation. The teeth, from their diversified shapes, form an extraordinary set of chisels and wedges for cutting and triturating the food, and are so arranged as to be most efficient in their operations. The enamel with which they are covered is so hard, that in early stages of society teeth were used to strike fire, the same as we, in modern times, employ flint against steel.

Viewing the teeth collectively, in their natural relative situations, they form an arch of apparent and real strength, the upper front teeth projecting a little beyond and over the teeth in the lower jaw, whilst the side teeth, although immediately over each other, are so arranged that each tooth falls upon the half of a neighbouring tooth; thus by an uniform division of the pressure of mastication, they increase the strength, and contribute additional security to these organs. From the manifest structure of the teeth, for the purpose of mastication ALONE, it is obvious that our efforts should be directed to keep the mechanism of the mouth perfect, in order that we may cause the food to be properly prepared, which may be truly considered the first important steps towards good digestion; and in this respect it cannot be disregarded

without inflicting a corresponding injury on the health in general. The distressing sensations arising from imperfectly masticated food, must convince every one of the paramount necessity of possessing teeth sound and perfect: and those individuals who have lost their teeth, and, as a natural consequence, suffer from indigestion, should certainly consider the necessity of replacing them by artificial means, an important object, if they wish to regain their former health and comfort.

SECONDLY, WITH REGARD TO ARTICULATION.

The next point of view in which we are to consider the importance of the teeth, is that of their connection with the grand prerogative of man, THE GIFT OF SPEECH. The teeth are absolutely indispensably to perfect articulation, and are mainly concerned in the modulation of the voice. Of this perhaps few persons are sufficiently aware, until they have been deprived of them; then the fact forces itself upon their consideration, in a manner which, but for the resources of art, might prove of the most painful consequences to their daily avocations, as well as to their future prospects.

That the dental organs are largely concerned in enunciation, must be admitted by all. The first lisping of childhood are but the effects of imperfect formation of the organs of speech, of which the teeth form no unimportant part, and every change to mature development of the system generally—in other words, every additional tooth the child obtains renders its

utterance more and more distinct. In adult age, we can easily perceive a marked defect in the pronunciation of any who may have suddenly become deprived of a front tooth: it is more difficult to trace in the absence of the side teeth, but it is quite certain that no voice can be perfect, if one or more teeth be missing, no matter where the vacancies may be situated in the mouth. To all public speakers, whether in the senate, at the bar, or on the stage, teeth, real or artificial, are indispensable; without them, the graces of eloquence are lost, and the powers of oratory very much diminished.

THIRDLY, WITH REGARD TO PERSONAL APPEARANCE.

The preservation, by original care and artificial aids, of the beautiful arch which composes the dental system, is essential to pleasing appearance, as well as to the other objects just indicated. Without teeth, well-coloured and well-shaped, the other features, however intrinsically attractive, lose all their charms; and where the teeth are actually foul and decayed, a person otherwise engaging becomes absolutely repulsive. It has been well remarked—

"As an essential point of beauty, the teeth must ever stand pre-eminent. No regularity of features, no brilliancy of complexion, no sparkling eyes, nor silken braids of jetty hair, can render that lady beautiful, who, when "smiling lips present to view a mass of Teeth of every hue." On the contrary, even homely features and a sallow complexion are embellished and rendered agreeable "with Teeth the whitest of

pearls" that thousands might covet to own. A mouth large and ill-formed will pass unnoticed when it contains teeth beautifully white and even. In short, whenever nature fails to bestow her gifts on the teeth, and has made them defective in form, and tarnished in colour, great care and cleanliness should be used, in order to hide these imperfections and faults: for then, if the teeth do not attract our regard, they will not affect us with disgust. Too much stress, therefore, cannot be laid on every argument in favour of preserving the teeth in a sound state as long as possible, and when they fail, "and the grinders are low," to have their places properly supplied with artificial ones."

LASTLY.

In casting aside the considerations which have just been urged, it may be mentioned that if nature has denied teeth to our early infancy, she has also wisely provided food not requiring them; while for old age, when equally deprived of teeth, she has made no corresponding provision; but as nature, when rightly understood, is uniformly found to have perfected her works, it may reasonably be inferred that this apparent imperfection in the human teeth is greatly owing to man himself. It appears to have been intended that in old age man should recur to the food proper for infancy, or that the teeth should continue to perform their functions to the end of life. It will serve the purpose here to state that whatever is intended, man does not do all in his power to save his teeth, nor

when they fail, does he recur to such food as his stomach, without their aid, can digest.

If the above remarks be just, it follows that every method which has for its object the preservation of health, and the increase of the enjoyments of that age to which we all look forward with the hope of happiness, must be considered laudable and deserving of encouragement. If the use of artificial teeth have come in late among the benefits conferred on mankind, that circumstance ought to be ascribed less to their real utility and importance, than to the difficulty of doing them justice.

It may not be generally known, that from a single tooth to a complete set can be supplied with a more perfect certainty of success than could be practiced in any other case; this may be considered as one of the triumphs of human ingenuity in obviating the effects of personal privation. If a hand or foot be lost, the utmost that can be done is to imitate some of the missing member's actions, whilst the more important are beyond the reach of art; but there is scarcely a single instance in which the uses of the teeth may not be fully restored. As those who have lost their teeth will have the strongest reason for setting a high value on the teeth which remain, it should be observed that nothing will tend more to their preservation than immediately supplying the places of those which have been removed: where this is neglected, the remaining teeth will not be likely to prove of any considerable durability. When deficiencies of the teeth have not been properly supplied, those that are left speedily become loose, or approximate too closely to each other;

therefore it is necessary to supply every vacancy as soon as it occurs, if only to support and preserve the teeth which remain.

Those persons most interested in the foregoing remarks might naturally feel a desire to obtain some information as to the nature of artificial teeth, and the operations to be performed, which would guide them, before having recourse to the dentist; this information is here given candidly, and without the slightest reservation, for the benefit of every one requiring artificial aid.

First, with reference to the nature of the materials and the manufacture of Artificial Teeth.

The materials used in the construction of artificial teeth are various, and their combinations manifold, the beds, plates, or bases being generally formed of hard or soft substances or materials, or a combination of either; and the teeth themselves, which are embedded in or attached to the plates or bases, being composed of kaolin, feld-spar, and silex, ordinarily called mineral, and shaped and coloured to resemble human teeth. Several processes, unnecesssary here to describe, are gone through to render the teeth hard and undestructible for the purposes of mastication, and to enable them to be naturally shaped to the ever-varying forms of the mouth which present themselves before the dentist, the skill and ability of the operator being shown by the simple circumstance that the wearer of properly-constructed artificial teeth uses them, and knows no difference from his own, and all observers

imagine the dental art has never been called into requisition. The contrast between apparent or actual discomfort and easily-recognized artificial teeth, and the ease, perfection, and undetectibility, of good manipulation, constitute the difference between clumsy and unskilful handling and the application of experienced and scientific practice. Where the one fails to succeed, in innumerable instances, and under all circumstances, falls short of that perfection which betrays the art itself, the other may be safely relied on for close and beautiful adaptations to nature, and a success in every case which renders failure next to impossible.

The arrangement of an artificial case and the combinations of the various materials are serious considerations with the scientific and conscientious dentist, as it is impossible, and would even be wrong, to treat all cases alike; his judgement in the selection and arrangement of the materials contributing to the comfort and satisfaction of the patient. A soft, elastic, and imperishable base is used in cases where great absorption of gums has taken place, or where the gums themselves are tender, or where the extraction of decayed or loose stumps of teeth are objected to, then this material becomes invaluable; and after harrassing and irksome trials of hard metal plates, the use of this substance has resulted in the highest benefit.

On the other hand, where extreme lightness and freedom from bulk in the mouth is required, and the gums are firm and solid, different construction would be required, but giving the same ease as a softer substance, if properly manipulated and understood.

Then, there is the union of hard and soft substances,

so arranged that the pressure upon different parts of the gum and palate is made equal, the tender parts being pressed upon by the soft material, and the firm portion by the hard material, so that, in mastication, the whole mouth is made uniformly to bear the strain or pressure which, to the casual observer, must be obviously a great desideratum.

In the workmanship, there must be the closest accuracy of fitting, and much depends on the knowledge and experience of the professional man in taking models or obtaining moulds of the form of the mouth. This process being accurately performed, there is the certainty that food will not accumulate between the gums and the framework, one of the most unpleasant things to which ordinary artificial work is exposed, and which is as highly objectionable to the wearer, as it is repugnant to a sensitive mind, and often betokens a want of cleanliness, when it is simply the arrangement of the artificial teeth, which is at fault.

All the materials alluded to ought to be of the purest character, and the food, saliva, or the mechanical action of mastication will not affect them in any way. But unfortunately, the rage in many instances for cheapness, has led to the introduction of inferior materials, which, added to indifferent and clumsy workmanship, palming off ill-fitting plates with deep air chambers, causing the mucus membrance of the mouth to become spongy and diseased, and has often proved more injurious to the health and comfort of the patient than ten times the value of the teeth. As a rule, it is impossible to furnish superior artificial teeth of the best possible construction and materials,

where every point is studied, elaborated, and perfected, at the low prices often temptingly announced or set forth in advertisements. Excessively high charges are unfair; excessively low ones always suspicious. Moderation is the just means, and will generally be found accompanied by fair dealing and efficient treatment.

Having briefly adverted to the nature of the materials and the construction of artifical teeth, other questions which are sometimes, categorically, put to the dentist, are here replied to, which may prove useful to many persons desirous of knowing something more about the insertion of artificial teeth to replace those that are lost.

The first question which naturally suggests itself would be—

"Is there much pain in the operation requisite for fixing Artificial Teeth?"

It certainly is a prevailing opinion that there is much pain in the operation, but it is entirely erroneous, for in the greatest number of cases there is a PERFECT FREEDOM FROM PAIN. This may safely be asserted, as numbers of patients who entertained great apprehension, have subsequently expressed their gratification and astonishment at finding the nature of the operation completely painless.

It may here be strongly urged upon those who require artificial substitutes, never to submit to have teeth or stumps extracted for that purpose, as if only one tooth remain, or even stumps, (except they be not firm,) they are of essential service in preventing the

sinking in of the cheeks and lips, and the receding of the gums, and are of great advantage in many other respects.

The next question is, "Whether there is any inconvenience in wearing Artificial Teeth particularly at first?"

To this question there can only be one answer. That there is an amount of inconvenience felt, more or less, governed by the number of teeth inserted (although in numerous cases no such inconvenience is experienced.) This inconvenience or, more properly speaking, awkwardness, wears off imperceptibly after the first half hour, and ultimately there is greater inconvenience in being without the artificial teeth; so much so, that it frequently occurs that patients, after a lapse of a few weeks, express themselves to the effect that they would not be without artificial teeth upon any consideration, and only regret that they did not have them sooner.

"Will the Artificial Teeth affect the Natural Teeth remaining, or cause them to decay?"

To this question may be replied that the wearing of artificial teeth will contribute an amount of support to those remaining in the mouth, which will materially assist them. And with regard to causing them to decay, artificial teeth, when properly constructed and adapted, can have no possible effect upon them.

With reference to the durability of artificial teeth,

it may be stated that, when properly constructed, and of good materials, they will last a very long time—say ten, fifteen, or twenty years, or longer. This entirely depends upon the nature of the case, the carefulness of the patient, and accidents, either to the mouth or to the artificial set. The teeth themselves, will never change colour nor decay, nor can they ever be affected by acids, or become deleterious in the mouth, so that the durability of the artificial set may be unquestioned.

Dr. Cogswell begs to intimate that, in his practice for the past 18 years he has employed only those materials and teeth which he can guarantee, and to which he alludes above. The base materials act injuriously on the system, undermine the health, and produce cancer and other diseases. The false delicacy of the sufferer, and his ignorance of what causes his complaint, prevent him receiving such advice as would meet his case. Dr. Cogswell has had ample opportunity of testifying to the evil arising from this practice, from the number of patients applying to him who suffer from the use of impure material and badly fitting plates, supplied to them in the construction of their artificial teeth.

Finally, with regard to prices of Artificial Teeth.

Dr. Cogswell's scale of charges for really good and serviceable teeth is based upon the most moderate computation. They are incorrodible, beautifully enameled, and can be matched so closely in colour and shape to those left in the mouth, that the closest observer cannot detect the difference. They will never

change colour or decay, and they possess numerous and undoubted advantages, which will be apparent by inspection of the illustrative specimens, which may be seen every day 111 Hollis Street, where they have already been examined by hundreds, to whom the demonstration thus offered of indisputable improvements has given gratification, and it is worthy the attention of those who have not as yet sufficiently studied the subject, but who adequately value, and would wish to have, when necessary, the full benefit of dental science in its present advanced stage of development.

The various cases of injury and difigurement are so accurately delineated, that almost every defect and deficiency can be seen at a glance, and every improvement comprehended which would conduce to the attainment of dental perfection.

It may be sufficient, however, to say, that the artificial teeth constructed on the new base Paladium and vulcanite rubber are extremely light, and afford the utmost freedom to the mouth; and from their perfect adaptation to the defects of nature, they may be worn on the most tender gums, or in most difficult cases, where every other method has failed, with comfort and advantage. They adhere to the gums with wonderful tenacity, without sharp edges or undue pressure, and are immovable, except at the will of the wearer.

Artificial teeth made in the ordinary way are rendered useless by the loss of any of the natural teeth to which they are attached; but by the new material they act independently of the teeth remaining in the mouth, and cannot be impaired, thereby proving their

usefulness and durability. Detection is impossible; and they may therefore be pronounced superior to every kind of artificial teeth of ordinary construction. Mastication and articulation is guaranteed.

Old sets remodelled when desirable.

Painless Extraction, &c.

The introduction of the new agent, protoxide of nitrogen, or laughing-gas, has advantages which is denied to chloroform or ether. In the first place, it is most rapid and evanescent in its effects, a few seconds being sufficient to obtain the necessary condition of immunity from pain; while, with chloroform, to obtain the same result, sometimes takes twenty minutes. In the next place, recovery is prompt and free from the slightest unpleasantness, whilst its advantages over ether are, that the latter is difficult to apply where teeth situated far back in the mouth have to be removed, and with the laughing-gas, it is of equal indifference where the teeth are situated which require to be extracted.

With pure ether and protoxide of nitrogen, then, as the agents, all operations in dental surgery are performed, which, without their use, would be painful and unpleasant; and, although this branch of the subject is simply headed "Painless Extractions," it might with more propriety be called "*Painless Dentistry*," for the introduction and use of ether and nitrous oxide gas into dental practice, has divested all operations connected with it of the *old* fashioned, useless, and

unnecessary horrors. We are using the condensed nitrous oxide gas with improved aparatus, which has become so popular in England, and preferable to the ordinary gas, as the condensed is perfectly pure and harmless.

Filling Decayed Teeth.

Respecting the proper mode of saving decayed and troublesome teeth, many persons, after having their teeth filled, have been compelled to resort to extraction, vowing that they never would have another filled, but would prefer the loss of it. This arises from the prevalent deficiency of knowledge respecting this special branch of practice. It is useless to fill a tooth whilst it is giving pain, or whilst pain is felt in preparing it for filling, or while there is an exposed nerve, unless properly treated. An immense number of teeth are lost by the wrong manner in which they are even prepared for filling. No proper effort is made to prevent pressure on the nerve, to give it room in its curiously-constructed domicile, to enclose it naturally in the space which it held before the tooth became decayed, or to remove it altogether. Were either properly done, filling of teeth would be generally adopted, and looked upon as far superior to extraction, and the ultimate resort to artificial teeth might be delayed indefinitely.

Then, again, if a tooth be skilfully filled with a suitable material, its preservation may be regarded as certain; for the operation of "filling," when thoroughly performed, *is preservation and cure combined.* It cannot, however, be too strongly impressed on the

minds of the prudent, that "a stitch in time saves nine," and that if the slightest sign of decay be discernible, it should be attended to *without* delay.

Various materials are employed, such as gold-foil, tin-foil, amalgam, gutta percha, osteo-plastic, &c., for filling, all of which are useful in their way. It is quite a distinct branch in the dental art, and some attain the utmost celebrity for their beautiful, firm, and durable fillings. The range of prices varies with the materials employed and the nature and extent of the cavities of the teeth to be filled, but they average from $1 upwards, depending upon the material used as well as time occupied. For durability and beauty, gold is the only reliable metal for filling.

Salivary Calculus or Tartar, and Scurvy in the gums.

There is no disease to which the mouth is liable more destructive than scurvy in the gums. The loss of teeth is more to be attributed to it than to any other cause. On its first appearance the gums bleed on the most trifling occasion, become spongy, lose that firm texture they have in a healthy state, causing the breath to be offensive and repulsive to every one under its influence, beside oth[illegible] evils repugnant to a sensitive and refined mind. A soft substance invariably accumulates round the necks of the teeth, gradually becoming harder and more abundant, especially on the inside of the lower front teeth, and outside the upper molars, penetrates the gums, which gradually waste away; the teeth then become loose and drop out whole

from their sockets, and it is well known that the loss of teeth arises more from this cause than from any other. In short, scurvy and tartar in the gums affects persons of all ages and constitutions, and if not speedily removed, will be the primary cause of toothache and decay.

Detersive lotions for removing scorbutic affections of the gums may be obtained personally, or they will be sent, carriage free, to any part of the Province. $1 and $1.50 each bottle.

Preservation of the Teeth better than Cure.

Attention to the preservation of the teeth cannot be commenced too early. Children should be taught to make it a part of their daily ablution, and those who have grown up in the neglect of it should no longer delay in attending to it. It should always be remembered, that as nothing is more easy than to contract a habit of neglecting the teeth, (which is often done unconsciously,) so nothing is more easy than to overcome such a habit. A simple rule laid down and adhered to, of attending to them every day for a fortnight, would, in most cases prove sufficient; and when once they have been restored to a proper state, the comfort such practice affords would effectually prevent its being on any after occasion omitted.

And here it may be proper to remark on the practice of those who seem to have contracted a determined habit of neglecting the teeth, and who appear as if they considered the state of their teeth as not in any

manner influencing their present appearance; whereas, almost everyone is aware (who is accustomed to observe) that there is scarcely a greater personal recommendation than clean teeth, and scarcely an occasion of more universal and involuntarily aversion than the contrary.

Children's Teeth.

From about the age of six or eight years, children begin to lose their temporary and acquire their permanent teeth.

This is a very important period as to its consequences with the after part of life; and parents can scarcely perform a greater service to the persons of their children than by having their teeth frequently inspected, in order to correct, whilst possible, any irregularity of formation, which can be corrected in almost every case if taken in time.

Tooth Powders and Lotions.

With regard to tooth powders and lotions, a vast variety of preparations have at different times been advanced. If properly prepared, however, their efficacy is undoubted; but, unfortunately, many of the tooth powders which are offered for sale, with the promise of rendering the teeth beautifully white, perform for a short time all that is promised at the expense of permanent and irremediable injury to the teeth; for they often contain a quantity of tartaric or other acid, which effects a gradual decomposition of the enamel.

Dr. Cogswell's preparations do not contain any hurtful ingredient, and can be confidently recommended for cleansing the teeth, without injuring the enamel, which is designed *especially* to correct the acidity of the mouth.

Tooth Powders, 25 cts. and 50 cts. per box.

Examination of the Teeth.

It is a fact too well known, and which every one's experience daily confirms, that few persons pass through life without more or less inconvenience through disease of the teeth. In infancy their formation and growth is a source of great and constant anxiety to the fond parent, and they produce deviations from health, which often continue through life.

In every family it should be a rule to have the teeth of children frequently inspected by a dentist—a laudable practice, followed in most public seminaries in England and the United States, being a preventive of much future pain and regret; and children, when they attain the age of maturity, will be more grateful for this attention, than for those accomplishments or indulgences which have no connexion with health and comfort. It may here be added, that if facts and suggestions like those contained in the present brochure, were brought more extensively before the notice of the public, the agonies of toothache, the unhealthy incapacity to prepare the food properly for the stomach, the ungraceful mumbling which too often disfigures the enunciations of persons whose language would other-

wise be distinct and correct, and the deformity of offensive, discoloured, and diseased teeth, would seldom be witnessed or experienced.

In conclusion, Dr. Cogswell begs to observe that he has been established in the city of Halifax for the past fifteen years, and having enjoyed the patronage of the Marquis and Marchioness of Normanby, Admiral Sir James Hope, Admiral Sir Alex. Milne, as well as numerous others of high rank, wealth, and position, not only in the *army* and *navy*, but among the numerous citizens of Halifax, and the Province of Nova Scotia—still desiring to meet the wants and requirements of thousands, and to relieve suffering humanity by *prevention as well as cure*, is the object of this brochure.

Dr. Cogswell may be consulted daily in all branches appertaining to his profession at his office,

111 HOLLIS STREET,

BETWEEN HALIFAX AND INTERNATIONAL HOTELS,

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